

CLAIMS

What is claimed is:

1. A coin box for a snack dispenser, comprising:
an upper portion containing an internal control circuitry, the upper portion being capable of accepting at least one coin inserted into the coin box, the internal control circuitry being capable of identifying the monetary value of the coin and activating at least one plunger to operate at least one arm of a door control mechanism, the at least one arm thereby unlocking a door of a snack dispenser to allow a customer to obtain a product from a vending compartment of the snack dispenser; and
a lower portion for accepting and storing the at least one coin.
2. The coin box of Claim 1 wherein the at least one plunger is activated when the monetary value of the coin equals a monetary value of the product.
3. The coin box of Claim 2 wherein the internal control circuitry includes a coin track and at least one set of light pipes.
4. The coin box of Claim 3 wherein the at least one set of light pipes is capable of transmitting and reflecting at least one infrared beam.
5. The coin box of Claim 4 wherein the at least one set of light pipes measures the outside diameter of the coin inserted into the coin box.
6. The coin box of Claim 5 wherein the internal control circuitry includes the capability of correlating a unique monetary value to the outside diameter of the coin inserted into the coin box.
7. The coin box of Claim 6 wherein the upper portion of the coin box includes a data entry device for entering one of either a set of numeric characters, a set of alphabetic characters, or a combination of numbers and alphabetic characters.
8. The coin box of Claim 7 wherein the data entry device is a key pad.
9. The coin box of Claim 8 further comprising a display capable of displaying at least one of either the total monetary value of the at least one coin inserted into the coin box, the personal identification number entered into the coin box through the data entry device, or a maintenance code for servicing the coin box.

10. The coin box of Claim 9 wherein the internal control circuit includes the capability of
of activating the at least one plunger after the customer has entered a personal
identification number through the data entry device.

11. The coin box of Claim 10 wherein the coin track includes a floor which is
generally downwardly angled and a curved track.

12. The coin box of Claim 11 wherein the coin track includes an initial
generally upward portion of the floor located before the generally downwardly angled
portion of the floor.

13. The coin box of Claim 12 wherein the internal control circuitry includes the
capability to store coin box information.

14. The coin box of Claim 13 wherein the coin box information includes at
least one of a set of personal identification numbers, the total monetary value of all of
the at least one coin inserted into the coin box, and a unique serial number for the coin
box.

15. The coin box of Claim 14 wherein the coin box information can be
downloaded from the coin box into another storage device.

16. The coin box of Claim 15 wherein the coin box information is downloaded
using a remotely operated infrared communication device.

17. The coin box of Claim 16 wherein the coin box information can be
modified using remotely operated infrared communication device.

18. The process of using a coin box to operate a door control mechanism on a
snack dispenser, comprising the steps of:

installing a coin box into a snack dispenser, the coin box having an
internal control circuitry;

providing the internal control circuitry with the capability of operating a
door control mechanism of the snack dispenser;

storing coin box information in the coin box; and

providing the coin box with the ability to upload and download the coin box
information using a remote electronic communication device.

19. The process of using a coin box to operate a door control mechanism on a snack dispenser of Claim 18, further comprising:

providing the internal circuitry with the capability of determining the monetary value of at least one coin inserted into the coin box; and

controlling the door control mechanism based upon the monetary value of the at least one coin inserted into the coin box.

20. The process of using a coin box to operate a door control mechanism on a snack dispenser of Claim 19, further comprising:

providing the coin box with a data entry device; and

providing the internal control circuitry with the capability to operate the door control mechanism after a personal identification number is entered using the data entry device.

21. A coin box for a snack dispenser, comprising:

means for accepting at least one coin;

means for one of either determining the monetary value of the coin or determining the acceptability of a personal identification number;

means for activating a door control mechanism when one of either the monetary value of the at least one coin matches the monetary value assigned to a snack located behind a door or the personal identification number authorizes access to the snack located behind the door;

means for entering the personal identification number into the coin box;

and

means for displaying one of either the monetary value of the at least one coin inserted into the coin box or the personal identification number entered into the coin box.